LARINE SUCCESSION ON LONE TREE ISLAND

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At this island in Saginaw Bay, Michigan, there occurs an interesting succession of fish-eating birds from early spring until late in summer. The birds are the Common, Black, and Caspian Terns, and also Bonaparte's Gulls.

Just a few days after the ice melts, the first migrants, the Bonaparte's Gulls, gradually appear. After a few days' feeding in deeper water (six feet approximately) they move northward. Almost immediately they are replaced by the Common Terns, which begin to arrive about the first week of May. Although the Black Terns also arrive at about the same time, the latter establish themselves and nest in the marshes just showing up along the shores. The Common Terns increase in number until the second week in June when they are most numerous, as there are usually at least 2000 pairs of birds in the colony. At this period, a few Herring Gulls and Caspian Terns may be seen at certain uninhabited points on the island. Apparently these Caspian Terns drop out of the flock as they pass the island on their northern migration. Perhaps the easy accessibility of small perch induces the birds to stay as evidenced by the number of these dead fish. about four inches, that may be seen floating nearby. Those that were recovered from the stomach of the Caspian Tern are of this size. A few Caspian Terns that were examined were all sexually immature and it may be assumed that the fact they are not ready to breed eliminates the necessity of their going north to the regular breeding areas. On very rare occasions, Black Terns can be seen in the island before the first week of August. Beginning with the second week, however, their presence becomes very conspicuous. They congregate in certain definite spots at the island and feed gregariously nearby. The lowering of the temperature which sends the minnows in deeper water probably accounts for their movement from the shore to the island. Almost simultaneously, a few young Bonaparte's Gulls arrive. presumably the immature ones that stay all summer in certain parts of Saginaw Bay.

While the young of four species are coming to the island, the adult Common Terns are fast leaving, so that there is a time when the island is inhabited almost entirely by young birds. The young Common Terns are then able to hunt food for themselves, but perhaps could not endure long distance flight—thus later departure may be explained.

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